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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,585	01/21/2004	Ronald W. Gilbert	E-1806 (130105.415)	3024
36977	7590	06/28/2006	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			BANGACHON, WILLIAM L	
701 FIFTH AVENUE, SUITE 6300			ART UNIT	
SEATTLE, WA 98104-7092			PAPER NUMBER	
			2612	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/762,585	GILBERT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	William L. Bangachon	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6-21 is/are rejected.
- 7) ☒ Claim(s) 7-8, 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Examiner's comments</u> .              |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, filed 4/6/2006, with respect to claims 1-5 have been fully considered and are persuasive.
2. Applicant's arguments with respect to claims 6-21 have been fully considered but they are not persuasive.

The Examiner respectfully traverse applicant's argument [Remarks section] that the transponder device of claims 6, 8, 11, and 15 operates the same way as the device of claim 1 because claims 6, 8, 11, and 15 are broader than claim 1. In claims 6, 8, 11, and 15, **there is no distinction between the oscillator circuit, ROM-based circuit, and microcontroller circuit in their operation in response to the strength of the received signal.**

### *Claim Objections*

3. Claims 7, 8 and 15 are objected to because of the following informalities:

Claims 7 (pg. 3, line 2), 8 (pg. 3, line 8) and 15 (pg. 5, line 11) recites "**a tag ...**". It should recite "**the tag ...**". Otherwise, it is unclear whether "**a tag**" is different from the radio frequency identification tag.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

4. The rejection of claims 1-10 and 15-20 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement is withdrawn.

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5. Claims 12-14 and 18, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12-14 lacks antecedent basis for suggesting a plurality of mode of operations. Claim 11 suggests only a single mode of operation among a plurality of operating modes when at a third distance.

In claim 18, it is unclear on whether the recited first and second distances is the same as the first and second distances in claim 15.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 6-10 and 15, 17-21 are rejected under 35 U.S.C. 102(b) as anticipated by GB 2292866 (Miyamoto).

In claim 6, Miyamoto teaches of a non-contact IC card (transponder device) comprising:

a card (e.g. radio frequency identification tag) shown in figures 1, 2, 4, configured to operate in a passive state for backscatter operations using rectified voltage {page 14, 2<sup>nd</sup> paragraph} and active state for transmission of a radio frequency signal at a longer

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distance using voltage from a battery {page 14, last paragraph}, and to change/switch modes of operation in accordance with the strength of a received radio frequency signal {page 14, 2<sup>nd</sup> paragraph}, the tag further comprising an oscillator circuit (6, 3), a ROM-based circuit (6), and a microcontroller circuit (i.e. CPU 5) that are each configured to operate in response to the strength of the received signal only.

In claim 7, when the strength of the received signal is weak, the card is in a standby mode (i.e. first mode) wherein only the oscillator operates and the operation of the microcontroller circuit is stopped. When the strength of the received signal is strong (i.e. second or third mode), the oscillator circuit (6, 3), the ROM-based circuit (6), and the microcontroller circuit (i.e. CPU 5) operate {col. 14, lines 5-20}. There is no distinction between the oscillator circuit, ROM-based circuit, and microcontroller circuit in their operation in response to the strength of the received signal in the claim.

Claims 8 and 15 recite the combination of claims 6 and 7, further comprising distinguishing the first, second, and third distances in relation to the RF source and the different modes of operation. In this case, since there is no distinction on how the different elements in the claim operate in response to the strength of the received signal, the operation of the oscillator, ROM-based circuit, and the microcontroller circuit of Miyamoto read on the claim whenever the card is within the interrogation field of the RF source (i.e. the first, second, and third distances are within the interrogation field of the source).

In claim 9, the mode is selected in response to the strength of the transmitted radio frequency signal (i.e. the first, second, and third distances are within the interrogation field of the source).

In claims 10, 17 and 19-20, in the standby mode (i.e. first mode), only the oscillator operates and the operation of the microcontroller circuit is stopped. When the strength of the received signal is strong (i.e. second or third mode), the oscillator circuit (6, 3), the ROM-based circuit (6), and the microcontroller circuit (i.e. CPU 5) operate {col. 14, lines 5-20}.

In claim 16, the transceiver is configured to vary the strength of the transmitted radio frequency signal.

Claim 18 recite the combination of claims 6 and 8 and therefore rejected for the same reasons.

In claim 21, the microcontroller having at least one input (i.e. power source or clock input) and at least one output (i.e. bus) for communication with external devices, as shown in the figures.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as obvious over GB 2292866 (Miyamoto) in view of USP 6,489,883 (Iiyama et al).

In claim 16, Miyamoto do not disclose "the transceiver is configured to vary the strength of the transmitted radio frequency signal". Iiyama, in the same field of endeavor (i.e. non-contact data carrier), teach of a part for controlling the voltage output of an electric-supply switching circuit 9 due to varying the strength of the transmitted

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radio frequency signal {col. 7, lines 15-28}. Iiyama suggests that said part is advantageous because it prevents damage to the internal circuitry of the carrier. It would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include said part for controlling a voltage output in the system of Miyamoto because, as taught by Iiyama, it prevents damage to the internal circuitry of the carrier.

12. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6,489,883 (Vercellotti et al) in view of GB 2292866 (Miyamoto).

In claim 11, Vercellotti et al teach of a dual mode electronic identification system comprising:

a micro-power oscillator (16), ROM-based circuit (15), and a CMOS microcontroller (14) to perform generating control signals for read mode operation {col. 4, lines 30-48}. The dual mode electronic identification system (i.e. tag 4) is configured to operate in an access mode (passive mode) and beacon mode (active mode) and to change modes of operation in accordance with the distance of the tag to the portal {col. 4, lines 25-29, lines 65+}. The tag is configured to operate in a passive mode (access mode) when at a second or third distance (interrogation range) from the transceiver (2), and in an active mode (beacon mode) when within a first distance (out of the interrogation range) from the transceiver that is closer to the transceiver than the first distance {col. 5, lines 46-61}. Vercellotti do not disclose a third mode of operation. Miyamoto teach of a third mode of operation (i.e. standby mode) in which the operation of clock and CPU 5 is stopped. Miyamoto suggests that the standby mode is beneficial



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because it reduces the consumption of the primary battery and therefore prolongs the life of the battery {Miyamoto, page 14, 2<sup>nd</sup> paragraph}. It would have been obvious to one of ordinary skill in the art, at the time of applicant's invention to include a third mode of operation (standby mode) in the system of Vercellotti because, as taught by Miyamoto, it reduces the consumption of the primary battery and therefore prolong the life of the battery.

Although Vercellotti et al do not disclose a second, third, and fourth modes, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include the different modes in the system of Vercellotti because there is no distinction on how the different elements in the claim operate in response to the strength of the received signal.

In claim 12, each mode of operation is activated and deactivated independent of the other modes of operation in response to the strength of the radio frequency signal {col. 5, lines 46-61}.

In claim 13, the tag is configured to deactivate all modes that are not operational {col. 5, lines 46-61}.

In claim 14, the tag is configured to activate only one mode of operation (i.e. read operation) at a time {col. 4, lines 30-48}.

***Allowable Subject Matter***

13. Claims 1-5 are allowed.

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14. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

15. The following is a statement of reasons for the indication of allowable subject matter:

With regards to claims 1-5, the prior art made of record do not disclose a radio frequency identification transponder having at least an oscillator circuit and a microcontroller and configured to operate in at least one of a plurality of modes of operation and to change modes of operation in accordance with the strength of a received radio frequency signal. The modes of operation comprising at least two of a first mode in which the oscillator circuit operates and the microcontroller does not operate in response to a first strength of the received radio signal, a second mode in which the oscillator circuit and the microcontroller both operate in response to a second strength of the received radio signal. and a third mode in which neither oscillator circuit nor the microcontroller operates in response to a third strength of the received radio frequency signal.

### ***Conclusion***

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Office Contact Information***

17. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to William Bangachon whose telephone number is **(571)-272-3065**. The Examiner can normally be reached on Monday – Thursday, 8:30 AM – 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy Garber can be reached on **(571)-272-7308**. The fax phone numbers for the organization where this application or proceeding is assigned is **571-273-8300** for regular and After Final formal communications. The Examiner's fax number is **(571)-273-3065** for informal communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.



William L Bangachon  
Examiner  
Art Unit 2635

June 21, 2006



BRIAN ZIMMERMAN  
PRIMARY EXAMINER